

Remarks

This Amendment is in response to the Office Action dated **December 5, 2008**. The Office Action rejected claims 16-24 under 35 USC § 112, second paragraph; and rejected claims 1-37 under 35 USC § 102 over Allen (US 2001/0016770).

By this Amendment, claims 16 and 18-23 are amended for clarification purposes. A listing of claims 16-24 marked to show changes relative to the previous submission is included at the end of this document. Please cancel claims 34-37 without prejudice. Applicants reserve the right to prosecute any cancelled subject matter in a subsequent related application. Reconsideration in view of the above amendments and following remarks is requested.

Reopening of Prosecution

Prosecution of this application on the merits was previously closed, as indicated in the *Ex Parte Quayle* Office Action mailed January 30, 2007. Applicants' response to the *Quayle* Action, filed May 30, 2007, addressed the non-substantive formal issues raised in the *Quayle* Action.

The Examiner did not issue a subsequent Office Action until December 5, 2008 - more than 18 months after Applicants' response. The current Office Action presents indefiniteness rejections under 35 USC § 112 and prior art rejections under 35 USC § 102 over Allen, a reference that was previously applied by the Examiner under 35 USC § 102 in the Office Action mailed August 30, 2005. Thus, after a lengthy delay period, the current Office Action merely presents language rejections and substantive rejections over previously applied art, all of which could have been presented several years ago.

Applicants request prompt consideration of this Amendment and the Examiner's cooperation in furthering prosecution of this application in a timely manner.

Specification

The specification amendments included in this Amendment were previously presented to the USPTO and considered by the Examiner. Thus, the specification amendments listed herein are identical to those included in the last Amendment, filed May 30, 2007. No new specification amendments have been added by this Amendment.

Claims

This Amendment indicates amendments to the claims vis-à-vis the original patent, and is believed to be in full compliance with 37 CFR § 1.173.

Status of Claims

As of the date of this Amendment, patent claims 1-15 are all pending, and added claims 16-33 are all pending. Please cancel claims 34-37 without prejudice.

Support for Claim Changes

The claim amendments made herein are for clarification purposes and are non-substantive in nature. As such, specific support for the amendments made herein should not be necessary; however, support for the claims added to this reissue application can be found at least in Figures 1B, 3A, 3B and 8A-8D.

Claim Rejections – 35 USC § 112

The Office Action rejected claims 16-24 as indefinite, noting a clarity issue with multiple occurrences of the phrase “a first serpentine circumferential band.”

Without acquiescing to the validity of any rejection under 35 USC § 112, claims 16 and 18-23 are amended for clarification purposes. For example, occurrences of “a first serpentine circumferential band” that refer to a previously recited first serpentine circumferential band have been changed to “a said first serpentine circumferential band.” Thus, it is clear that the later recitation refers to a previously recited band.

In view of the clarifying amendments, Applicants request withdrawal of the rejections under 35 USC § 112.

The content of claims 16-24 are provided at the end of this document for convenience, marked to show the amendments with respect to the previous version of these claims.

Claim Rejections – 35 USC § 102

The Office Action rejected claims 1-37 under 35 USC § 102 over Allen (US 2001/0016770). These rejections are discussed below with respect to the independent claims.

Independent claims 1 and 5

Independent claims 1 and 5 each recite structural limitations, and further recite certain interactions between the structural elements as the stent is expanded. For example, claim 1 recites “the axial outward distance traveled by the arms' outer ends in each pair of first and second arms is approximately equal to the reduction in length of the axial component length of the associated looped member as the stent is expanded.”

The rejection does not provide any analysis of how the Allen stent meets the structural limitations recited in claims 1 or 5, or any discussion of how the Allen stent would meet the “axial outward distance” and “axial component length” limitations relevant to stent expansion. The Allen reference itself does not disclose or suggest that the Allen stent would meet the limitations recited in claims 1 or 5. Therefore, Applicants assert that claims 1 and 5 are patentable over Allen under 35 USC § 102, and further that the Office Action has not presented a *prima facie* case of anticipation of claims 1 or 5. Claims 2-4 depend from claim 1 and claims 5-15 depend from claim 5. Each dependent claim is patentable over Allen for at least the reasons discussed with respect to the independent claim from which it depends. Applicants request withdrawal of the rejection of claims 1-15 over Allen under 35 USC § 102.

Independent claim 16

Claim 16 has been amended for clarification purposes and recites, “at least one opening not bounded by a said second serpentine circumferential band.”

The rejection characterizes each expandable cylindrical element 48 of Allen as including both a claimed first band and a claimed second band. See e.g Office Action at page 3. Thus, the rejection characterizes the Allen reinforcing members 44 as forming the claimed second bands.

The Allen stent does not meet the limitations of claim 16 because each opening in the stent is at least partially bounded by a reinforcing member 44. Thus, each opening in the Allen

Claims 17-20 and 22 depend from claim 16 and are patentable over Allen for at least the reasons discussed with respect to claim 16. Applicants request withdrawal of the rejection of claims 16-20 and 22 over Allen under 35 USC § 102.

Claim 21 has been amended for clarification purposes and recites, “wherein the serpentine circumferential bands comprise alternating peaks and troughs...a portion of the longitudinal connectors extending between peaks of the first and second serpentine circumferential bands, a portion of the longitudinal connectors extending between troughs of the first and second serpentine circumferential bands.” Thus, some longitudinal connectors are required to extend peak-to-peak and some longitudinal connectors are required to extend trough-to-trough.

Therefore, Allen does not teach a stent in accordance with claim 21, and Applicants request withdrawal of the rejection of claim 21 over Allen under 35 USC § 102.

Independent claim 23

Claim 23 recites, “the longitudinally extending connectors comprising first longitudinal connectors of a first length and second longitudinal connectors of a second length less than the first length.”

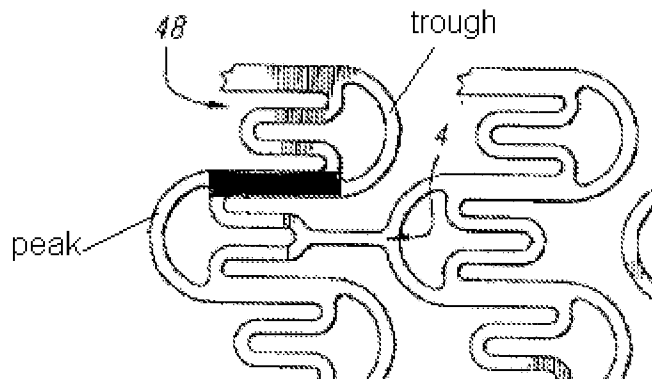
The rejection does not mention the above-noted limitations. Each stent pattern illustrated in the Allen disclosure shows connectors of uniform size and shape. Allen does not disclose or suggest a stent in accordance with claim 23, and claim 23 is patentable over Allen under 35 USC § 102.

Claim 24 depends from claim 23 and is patentable over Allen for at least the reasons discussed with respect to claim 23. Applicants request withdrawal of the rejection of claims 23 and 24 over Allen under 35 USC § 102.

Independent claim 25

Claim 25 recites “loop members arranged to form first bands extending about the circumference of the stent, each first band comprising alternating peaks and troughs, each peak separated from a trough adjacent thereto by a **bent portion** of a loop member.”

The Allen stent does not meet the “bent portion” limitation of claim 25. A marked excerpt from Figure 8 is provided below, indicating a peak and a trough in a first band.



It is clear that the connecting portion of the band between the peak and the trough, shaded above, is straight and that the peak is not separated from the trough by a bent portion as required by claim 25.

Claim 25 further recites limitations directed to the relative locations of first and

second bands, such as “first bands which are adjacent one another within a section separated one from the other by a second band.” Thus, claim 25 requires a second band to be located between adjacent first bands. The characterization of Allen asserted in the rejection, wherein each expandable cylindrical element 48 includes both a first band and a second band, does not meet this limitation. For example, in the Allen stent, a second band is not located between adjacent first bands.

Therefore, Applicants assert that claim 25 is patentable over Allen under 35 USC § 102. Claims 26 and 27 depend from claim 25 and are patentable over Allen for at least the reasons discussed with respect to claim 25. Applicants request withdrawal of the rejection of claims 25-27 over Allen under 35 USC § 102.

Independent claim 28

Claim 28 recites, “at least one second serpentine circumferential band immediately adjacent to and connected to another second serpentine circumferential band by a longitudinal connector.”

Allen does not disclose or suggest a stent in accordance with claim 28. In the characterization asserted in the rejection, wherein each expandable cylindrical element 48 includes both a first band and a second band, the stent does not include a second band immediately adjacent to another second band. Further, the connecting segments of Allen do not extend between two second bands as required by claim 28 – each Allen connector extends between a first band and a second band.

Therefore, Applicants assert that claim 28 is patentable over Allen under 35 USC § 102. Claims 29-33 depend from claim 28 and are patentable over Allen for at least the reasons discussed with respect to claim 28. Applicants request withdrawal of the rejection of claims 28-33 over Allen under 35 USC § 102.

Independent claim 34

Please cancel claims 34-37. The rejection of this claim set is moot.

Conclusion

Based on at least the foregoing amendments and remarks, Applicants respectfully submit this application is in condition for allowance. Favorable consideration and prompt allowance of claims 1-33 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

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Marked Version Showing Claim Amendments

16. A stent having a plurality of openings therethrough, the stent comprising a plurality of serpentine circumferential bands, adjacent serpentine circumferential bands connected one to the other, the serpentine circumferential bands including first serpentine circumferential bands of a first shape and second serpentine circumferential bands of a second shape different from the first shape, every first serpentine circumferential band being adjacent to a said second serpentine circumferential band and every second serpentine circumferential band being adjacent to a said first serpentine circumferential band, distal most openings of the stent being at least partially bounded by a said first serpentine circumferential band and at least partially bounded by a said second serpentine circumferential band, proximal most openings of the stent being at least partially bounded by a said first serpentine circumferential band and at least partially bounded by a said second serpentine circumferential band, at least one opening not bounded ~~being bound~~ by ~~serpentine circumferential bands other than a~~ said second serpentine circumferential band.

17. The stent of claim 16 wherein adjacent first and second serpentine circumferential bands are connected one to the other via a plurality of longitudinally extending connectors.

18. The stent of claim 17 wherein ~~the~~ a said first serpentine circumferential band has a width which differs from the width of ~~the~~ a said second serpentine circumferential band.

19. The stent of claim 16 wherein ~~the~~ a said first serpentine circumferential band has a width which differs from the width of ~~the~~ a said second serpentine circumferential band.

20. The stent of claim 17 wherein the serpentine circumferential bands comprise alternating peaks and troughs, the adjacent first and second serpentine circumferential bands being connected only via the longitudinal connectors, a portion of the longitudinal connectors extending between peaks of the first and second serpentine circumferential bands, ~~and adjacent first and second serpentine circumferential bands which are connected only via~~ a portion of the longitudinal connectors ~~which extend~~ extending between troughs of the first and second serpentine circumferential bands.

21. A stent having a plurality of openings therethrough, the stent comprising a plurality of serpentine circumferential bands, adjacent serpentine circumferential bands connected one to the other, the serpentine circumferential bands including first serpentine circumferential bands of a first shape and second serpentine circumferential bands of a second shape different from the first

shape, every first serpentine circumferential band being adjacent to a said second serpentine circumferential band and every second serpentine circumferential band being adjacent to a said first serpentine circumferential band, at least one said first serpentine circumferential band adjacent to and connected to another said first serpentine circumferential band, distal most openings of the stent being at least partially bounded by a said first serpentine circumferential band and at least partially bounded by a said second serpentine circumferential band, proximal most openings of the stent being at least partially bounded by a said first serpentine circumferential band and at least partially bounded by a said second serpentine circumferential band, wherein adjacent first and second serpentine circumferential bands are connected one to the other via a plurality of longitudinally extending connectors, wherein ~~the~~ a said first serpentine circumferential band has a width which differs from the width of ~~the~~ a said second serpentine circumferential band,

wherein the serpentine circumferential bands comprise alternating peaks and troughs, the adjacent first and second serpentine circumferential bands being connected only via the longitudinal connectors, a portion of the longitudinal connectors extending between peaks of the first and second serpentine circumferential bands, a portion of the ~~and adjacent first and second serpentine circumferential bands which are connected only via longitudinal connectors which extend~~ extending between troughs of the first and second serpentine circumferential bands.

22. The stent of claim 16 wherein adjacent serpentine circumferential bands are connected one to the other via one or more longitudinally extending connectors.

23. A stent having a plurality of openings therethrough, the stent comprising a plurality of serpentine circumferential bands, adjacent serpentine circumferential bands connected one to the other, the serpentine circumferential bands including first serpentine circumferential bands of a first shape and second serpentine circumferential bands of a second shape different from the first shape, every first serpentine circumferential band being adjacent to a said second serpentine circumferential band and every second serpentine circumferential band being adjacent to a said first serpentine circumferential band, at least one said first serpentine circumferential band adjacent to and connected to another said first serpentine circumferential band, distal most openings of the stent being at least partially bounded by a said first serpentine circumferential band and at least partially bounded by a said second serpentine circumferential band, proximal

most openings of the stent being at least partially bounded by a said first serpentine circumferential band and at least partially bounded by a said second serpentine circumferential band, wherein adjacent serpentine circumferential bands are connected one to the other via one or more longitudinally extending connectors,

the longitudinally extending connectors comprising first longitudinal connectors of a first length and second longitudinal connectors of a second length less than the first length.

24. The stent of claim 23 wherein the serpentine circumferential bands comprise alternating peaks and troughs, the first longitudinal connectors extending between peaks of some adjacent serpentine circumferential bands and between troughs of other adjacent serpentine circumferential bands, the second longitudinal connectors extending between peaks and troughs.